

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (previously presented) A disk drive assembly comprising:

a spindle adapted to rotate about a longitudinal axis;

data storage disks surrounded by fluid medium, each of the disks having a disk outer edge and a disk inner edge, the disks being mounted on the spindle to rotate

5 therewith about the spindle longitudinal axis, rotation of the disks in a first direction

creating a flow of the fluid medium in the first direction, at least one of the disks having approximately concentric tracks disposed at different radial positions between the disk outer edge and the disk inner edge;

slider assemblies, each slider assembly including at least one transducer head

10 capable of reading and writing information on one of the disks;

an actuator assembly for positioning the slider assemblies over the tracks;

a baffle disposed upstream of the actuator assembly, the baffle extending in a direction of the spindle longitudinal axis and having an inner surface disposed at least one millimeter outside of the outer edges of the disks; and

15 combs mounted on the baffle, at least one of the combs:

disposed adjacent to at least one of the disks to form a gap between the comb and a corresponding adjacent disk, the gap disposed in the direction of the spindle longitudinal axis and in a range from approximately 0.1 millimeter to approximately 20 millimeters;

20 extends radially inward from a comb outer edge to a comb inner edge, a
portion of the comb outer edge disposed at the inner surface of the baffle;
disposed upstream of a corresponding actuator assembly;
extending in a disk circumferential direction from a leading edge to a
trailing edge, the leading edge disposed upstream of the trailing edge;
25 extending radially inward from the baffle; and
having a thickness that increases from the leading edge to the trailing
edge.

2. (original) The disk drive assembly of claim 1, wherein the baffle comprises a
baffle plate.

3. (original) The disk drive assembly of claim 2, wherein the baffle plate and the
combs are elements of an integral mechanical structure.

4. (original) The disk drive assembly of claim 1 including a second set of combs
extending radially inward from an outer attachment element inner surface, the outer
attachment element inner surface having a diameter not less than the outer edge of the
disks, each of the second set of combs:

5 disposed in a position adjacent at least one of the disks in the direction of the
spindle longitudinal axis; and
disposed downstream of the slider assemblies.

5. (original) The disk drive assembly of claim 1, wherein at least one of the combs comprises more than one element, at least two of the comb elements are separated from each other by an intra-comb gap, the intra-comb gap extending radially from approximately the comb inner diameter to approximately the comb outer diameter.

6. (original) The disk drive assembly of claim 1, wherein at least one of the combs comprises a single integral structure.

7. (cancelled).

8. (original) The disk drive assembly of claim 1, wherein at least one of the combs has a thickness that increases from the comb inner diameter to the comb outer diameter.

9. (original) The disk drive assembly of claim 1, wherein the gap between at least one of the combs and the corresponding adjacent disk is less than approximately 0.4 millimeters.

10. (previously presented) The disk drive assembly of claim 1, wherein the at least one of the combs extends radially inward from the baffle more than approximately ten percent of a distance between an inner edge and the outer edge of the corresponding adjacent disk.

11. (previously presented) A disk drive assembly comprising:

a spindle adapted to rotate about a longitudinal axis;

data storage disks surrounded by fluid medium, each of the disks having a disk
outer edge and a disk inner edge, the disks being mounted on the spindle to rotate
5 therewith about the spindle longitudinal axis, rotation of the disks in a first direction
creating a flow of the fluid medium in the first direction, at least one of the disks having
approximately concentric tracks disposed at different radial positions between the disk
outer edge and the disk inner edge;

slider assemblies, each slider assembly including at least one transducer head
10 capable of reading and writing information on one of said disks;

an actuator assembly for positioning the slider assemblies over the tracks;

a comb fixture disposed apart from the actuator assembly, and having an inner
surface separated by a first distance from the outer edges of the disks, the first distance
greater than approximately one millimeter;

15 combs coupled with and extending inwardly from the comb fixture, wherein the
combs have a leading edge and a trailing edge, the leading edge being disposed upstream
of the trailing edge, at least one of the combs:

disposed adjacent to a corresponding adjacent disk to provide a gap
between the comb and the corresponding adjacent disk, the gap disposed in the direction
20 of the spindle longitudinal axis and in a range from approximately 0.1 millimeters to
approximately 20 millimeters;

extending circumferentially around the spindle longitudinal axis; and

having a thickness that increases from the leading edge to the trailing edge.

12. (original) The disk drive assembly of claim 11 including a baffle disposed outside the disk outer edges and having an edge spaced closely to a segment of the disk outer edges, and wherein a first portion of the at least one comb extends radially inward beyond the outer edge of the corresponding adjacent disk, and a proximal edge of the first
5 portion extends circumferentially towards the actuator assembly forming a gap between the proximal edge and the baffle of no less than ten millimeters.

13. (original) The disk drive assembly of claim 11, wherein each of the combs includes:

a first portion having an outer diameter approximately equal to the comb fixture inner surface; and

5 a second portion extending closer to the slider assemblies and having an outer diameter less than the comb fixture inner surface.

14. (original) The disk drive assembly of claim 11, wherein the gap between at least one of the combs and the corresponding adjacent disk is less than approximately 0.4 millimeters.

15. (previously presented) The disk drive assembly of claim 11, wherein the at least one of the combs extends radially inward from the baffle more than approximately

ten percent of a distance between an inner edge and the outer edge of the corresponding adjacent disk.

16-18. (cancelled).

19. (previously presented) A comb assembly for reducing cross-track motion in a disk drive, the disk drive including at least one disk, a spindle, and at least one slider assembly, the comb assembly comprising:

at least one baffle disposed upstream of the slider assemblies, the baffle having an
5 inner surface disposed at least one millimeter outside of outer edges of the disks; and

at least one comb mounted on the baffle, wherein each comb:

disposed adjacent to at least one of the disks to provide a gap between the
comb and a corresponding adjacent disk, the gap disposed in the direction of a spindle
longitudinal axis and in a range from approximately 0.1 millimeter to approximately 20
10 millimeters;

extends radially inward from a comb outer diameter, the comb outer
diameter disposed approximately at the inner surface of the baffle;

disposed upstream of the slider assemblies;

extending in a disk circumferential direction from a leading edge to a
15 trailing edge, the leading edge disposed upstream of the trailing edge;

having a thickness that increases from the leading edge to the trailing
edge; and

extending radially inward from the baffle.

20. (cancelled).

21. (currently amended) A disk drive assembly comprising:

a spindle adapted to rotate about a longitudinal axis;

at least one data storage disk surrounded by fluid medium, each disk having a disk
outer edge and an a disk inner edge, each disk being mounted on the spindle to rotate
5 therewith about the spindle longitudinal axis, rotation of the disks in a first direction
creating a flow of the fluid medium in the first direction, at least one disk having
approximately concentric tracks disposed at different radial positions between the disk
outer edge and the disk inner edge;

at least one slider assembly, each slider assembly including at least one transducer
10 head for reading and writing information from a disk;

an actuator assembly for positioning the slider assembly over the tracks, the
actuator assembly including a leading edge and a trailing edge, wherein the leading edge
of the actuator assembly is disposed upstream from the trailing edge of the actuator
assembly;

15 a baffle disposed upstream of the actuator assembly, the baffle extending in a
direction of the spindle longitudinal axis and having an inner surface disposed outside of
the outer edges of the disks; and

combs mounted on the baffle, at least one of the combs having a leading edge and
a trailing edge, wherein the leading edge of the comb is disposed upstream of the trailing
20 edge of the comb and ~~wherein the trailing edge of the comb is substantially parallel to the~~
~~leading edge of the actuator assembly when the actuator assembly is positioned to read a~~

~~data track near the disk inner edge~~ wherein at least one of the combs has a thickness that increases from the leading edge of the comb to the trailing edge of the comb.

22. (cancelled).

23. (new) The disk drive assembly of claim 21, wherein the trailing edge of the comb is substantially parallel to the leading edge of the actuator assembly when the actuator assembly is positioned to read a data track near the disk inner edge.